

850nm High power & High intensity LED: AOP1-8505P3

AOP1-8505P3 is a semi-customized LED by using existing reflective mirror type package, whose peak-wavelength is 850nm typical. Since the larger chip is installed, Max. 2A (IFP) can be applied, and higher optical power can be realized with lower photocurrent.

■ Features

- High Optical output power
- 340mW/sr at IF=100mA
- Can be Operated with IFP=2A
($t_w \leq 0.55\text{ms}$, duty: 1/60)
- Small and Compact
(6x6x3mm package)
- Excellent light distribution



■ Applications

- Image sensing for analyzers and measuring instruments
- IR illuminator for surveillance system in the field of security and traffic survey

■ Reference Specification

$T_a=25^\circ\text{C}$

Parameter	Symbol	Max. Rating	Unit
Power Dissipation	P_D	300	mW
Forward Current (DC)	I_F	200	mA
Pulse Forward Current	I_{FRM}	2 ^{*1}	A

*1 I_{FRM} : $PW(\text{Pulse width}) \leq 0.55\text{ms}$, duty=1/60

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward Voltage	V_F		1.5	1.7	V	$I_F = 100\text{mA}$
Reverse Current	I_R			10	μA	$V_R = 40\text{V}$
Peak Wavelength	λ_p		850		nm	$I_F = 100\text{mA}$
Optical Output Power	P_O		50		mW	$I_F = 100\text{mA}$
Peak Luminous Intensity	I_E		340		mW/sr	$I_F = 100\text{mA}$
Half Angle	$\theta_{1/2}$		± 7		Deg.	$I_F = 100\text{mA}$